REMARKS

The Office Action mailed on April 15, 2010, has been received, and carefully considered.

Preliminarily, it should be noted that claim 1 has been amended to recite a method for producing a molded piece in which the circumferential web is formed in the outer boundary range and in the area of the largest extent along the whole periphery of the molded piece. Also, claim 12 has been amended to recite that the circumferential membrane has a thickness of from 50 µm to 500 µm.

Claims 1, 6-11, 13, and 17-19 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Filser et al. (WO 2002/045614) in view of Bodenmiller et al. (US 6,495,073) in further view of Suttor et al. (WO 2003/041606). Furthermore, claims 3-4, 12, 14-16, and 20 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Filser et al. in view of Bodenmiller et al.

The Applicants respectfully submit that the cited prior art does not disclose or suggest the presently claimed invention. Reconsideration and allowance of the pending claims is therefore respectfully requested in view of the following remarks.

Filser et al. discloses a dental bridge manufactured from a ceramic blank using a milling instrument. The dental bridge is connected with the ceramic blank via holding webs, which are separated after the inner and outer contour of the dental bridge is worked out by milling. One disadvantage of such a method is that, after separation of the webs, the connecting points between the webs and the dental bridge must be processed. This requirement is stated clearly in column 5, lines 45 et seq. of Filser (US 7,077,391):

> *"On completion of machining of the blank, the webs 20 are separated from the work piece 18 and the point of separation of the work piece is ground smooth."*

These disadvantages are avoided in the present invention, because a circumferential web exists between the molded piece worked out and the blank, the circumferential web being split after the molded piece has been completely worked out of the blank, inside and outside. The circumferential web quasi is a line-shaped connection between the molded piece and the blank, so that after splitting the circumferential web, the molded piece does not need to be reworked. Consequently, a molded piece can be produced very precisely, and with thin walls, which

after being removed from the blank do not need to be reworked, thus minimizing damage to the piece.

Furthermore, Filser et al. does not disclose that the webs, having a relatively thick cross section, run between the molded piece and the blank in the area of the largest extent of the molded piece. Filser et al. also does not disclose that the web, in the area of the largest extent, connects the molded piece and the blank, circumferentially.

The claimed feature that the splitting of the circumferential web is effected by circular milling using a milling tool set in its depth to recover the molded piece, is also not mentioned or suggested by Filser et al.

In this connection, reference is made to the Suttor et al. reference, which addresses the feature that circular milling is one possibility to mill a work piece. However, Suttor et al. is silent regarding the feature that a circumferential web connecting a molded piece and a mold blank is split by circular milling using a milling tool set in its depth. Indeed, such a disclosure cannot be found in the entire state of the art.

A combination of Filser et al. with the Bodenmiller et al. reference also would not lead a person or ordinary skill in the art to the present invention, because there is simply no motivation to combine the two references, which

are directed to two completely different methods of producing a molded piece.

Filser et al. teaches the production of a dental prosthesis from a molded blank by means of milling, whereby a connection to the blank remains until finishing of the molded piece.

In contrast to this, Bodenmiller et al. teaches that a blank needs to be embedded into an embedding mass 3, in order to produce a section of the molded piece from the blank. The section thus produced is then again embedded into a new embedding mass (see Fig. 5). The remaining part of the blank is then treated, as described at col. 8, lines 14 et seq. of Bodenmiller et al.:

> *"After the machining of the underside of the workpiece 6 is completed, the embedding mass 3 is subsequently once again poured into it (FIG. 4). It would also be possible to fill up the previously milled-out inside of the crown with the milling wax 3 again already before the machining of this first area of the outside of the crown, in order to support the side walls of the crown."*

Applicants submit that a person of ordinary skill in the art would not use the technique described by Bodenmiller et al. to further develop the method of a molded piece according to Filser et al. In addition, even with a combination of Filser et al. and Bodenmiller et al.,

a person skilled in the art would not arrive at the presently claimed invention.

Quite clearly, the Filser et al., Bodenmiller et al., and Suttor et al. references fail to disclose or suggest that a circumferential web remains between the molded piece and the blank, after production of the molded piece, as presently claimed.

Accordingly, claims 1 and 12, and claims dependent thereon, are novel and unobvious in view of the cited art.

As to the stated rejections of the dependent claims discussed by the Examiner in the Office action, claim 11 is directed to a method wherein the molded piece is caught on a padded retainer after the circumferential web is split in a position which approximately corresponds to the position of the molded piece in the mold blank.

The Bodenmiller et al. reference clearly lacks any hint as to the subject matter of claim 11. Certainly, Bodenmiller et al. provides a fluid mat 7, which is passed through by molten embedding mass 3 in order to expose the workpiece 6. There is no mention or suggestion in Bodenmiller et al. of splitting the webs connecting the workpiece 6 with a blank, i.e. a method step carried out prior to catching the molded piece. Totally different techniques are used to expose the workpiece 6, but even if

this difference is not taken into account, Bodenmiller et al. still lacks any hint that the workpiece is caught by the fluid mat 7 in a position in which the workpiece 6 is arranged in the embedding mass 3 prior to melting. It is not to be assumed that this happens because the molded piece is surrounded by the embedding mass which usually melts so that the workpiece 6 during melting of the embedding mass tilts to that side where the embedding mass is already molten.

With respect to the discussion of claim 12 in the Office action (paragraph 17, page 9), according to this claim, the molded piece is connected with a mold blank via a circumferential membrane. There is no mention or suggestion in Filser et al. of connecting the molded piece to the blank via a circumferential membrane. Rather, Filser et al. teaches away from such an arrangement, i.e. that the workpiece 18 is connected with the blank 10 via single webs 20. This is also made clear by Figs. 7, 9 and 10 of Filser et al., and especially by the detailed view according to Fig. 9.

Furthermore, in the present method, the membrane has through holes by which the circumferential membrane is perforated. There is clearly no mention or suggestion in Filser et al. of such an arrangement, although the Examiner

has taken the position that webs spaced to each other can be considered as a membrane with through holes. Such an interpretation of Filser et al. is illogical and is unacceptable to the Applicants.

The Examiner interprets Fig. 7 of Filser et al. as showing that the circumferential web runs in the area of the largest extent of the molded piece, although the drawing actually shows the contrary, because if the webs 20 extend from the largest extent of the molded piece, there should be no line in the drawing between the web 20 and the molded piece.

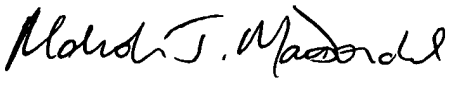
It is believed that presently amended claim 12, which requires that the circumferential membrane has a thickness of from 50 µm to 500 µm, further distinguishes the invention over Filser et al.

In view of the foregoing remarks, Applicants respectfully submit that the rejections under 35 U.S.C. 103(a) are unsustainable, and urge favorable reconsideration and withdrawal thereof.

It is believed that the present application is now in condition for allowance, and an early allowance to this effect is respectfully urged. If any final points remain that can be clarified by telephone, Examiner Abraham is

encouraged to contact Applicants' attorney at the number indicated below.

Respectfully submitted



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